

Work Order ID 128211

January-13-15 11:35:43 AM

128211

Page 1

Item ID: 647.7703

Revision ID:

Item Name: Strut Assembly

Start Date: 1/13/15 Start Qty: 20.00

Required Date: 1/30/15 Req'd Qty: 20.00

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

N900040100

Setup Start

NS1

Stop

NS2

Cust Item ID:

Customer:

Run Start

NR1

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

647.7700

A

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

20

EL

15-1-27

120

Weld per dwg A/R 4130 rod Batch: 1127825 0.00

120

Large Fab

Memo

0.00

Large Fab

1- ASSEMBLE AND WELD AS PER DWG

***IMPORTANT DIMENSION IS 8.35" ***

20

EL

15-1-27

130

QC9- Inspect visual per QSI004- Fusion Welds 0.00

130

QC

Memo

0.00

Quality Control

(20)

15-01-29

PD

Work Order ID 128211

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Page 2

Item ID: 647.7703 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Strut Assembly
 Start Date: 1/13/15 Start Qty: 20.00 *20* Cust Item ID:
 Required Date: 1/30/15 Req'd Qty: 20.00 *20* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	QC5- Inspect part completeness to step on W/O	0.00							
140						(20)	150129	PD	
QC	Memo	0.00							
Quality Control									
150	Outsource process-Cadplate per ^{draw} QSI0174.1.9.1	0.00							
150	cadplate spec IAW mil-c-5541 class 1A								
Outsource3	Memo	0.00							
Outsource process - Cad plate	Issue P/O : 27284								
	C of C is required								
160	Receive & Inspect for Damage & Mat'l Certs	0.00							
160									
Packaging	Memo	0.00							
Packaging									

20x 8015-02-6.

Page 3

[illegible]

Work Order ID 128211***128211***

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Item ID: 647.7703

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Strut Assembly

Start Date: 1/13/15 Start Qty: 20.00

20

Cust Item ID:

Required Date: 1/30/15 Req'd Qty: 20.00

20

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

200

Identify as per dwg & Stock Location: SCF 112 0.00***200***

Packaging

Memo

0.00

Packaging

20

FEB 09 2015

DAS
9.00

210

QC21- Final Inspection - Work Order Release 0.00

210

QC

Memo

0.00

Quality Control

MLJ 15-02-09

H/15.2.29

Picklist Print

January-13-15 11:35:43 AM

Page 1

Work Order ID: 128211

128211

Parent Item: 647.7703

647 7703

Parent Item Name: Strut Assembly

Start Date: 1/13/15

Required Date: 1/30/15

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP REV:A 15.01.07 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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647.7712		Manufactured	No				Each	25.0000		20			
----------	--	--------------	----	--	--	--	------	---------	--	----	--	--	--

647 7712

Strut Tube

EL 15-1-21

Location

Loc Qty

Loc Code

CCK113

25

94061

5

95252

20

20

647.7713

Manufactured No

Each

7.0000

20

647 7713

Strut Thread

EL 15-1-21

Location

Loc Qty

Loc Code

128260X13

CCK113

7

94100

7

7

647.7714

Manufactured No

Each

0.0000

20

647 7714

Strut Tube

EL 15-1-21

128261 X20

APICAL

INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO.

04741

SHEET 1 OF 1

DWG NO. 647.7700

REV: NC

PREPARED BY J. SOTO

DATE: 11/13/2014

EFFECT ON DWG
☒ INC. ☐ UNINC.

DWG TITLE: STRUT ASSY

APPROVED BY:

ENGR

[Signature]

MFG

[Signature]

QC

[Signature]

EFF.

NEXT ORDER

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

REASON: CREATED NEW CONFIGURATION. ADDED F/N 5.

ULO 128211

5	A	647.7714	1	STRUT TUBE	△	
4	R	647.7713	1	STRUT THREAD	△	△
3	R	647.7712	1	STRUT TUBE	△	
	C	647.7703	X	STRUT ASSY		
F/N	TC	PART NUMBER	.7703			
		QTY		DESCRIPTION	MATERIAL	SPECIFICATION
DOCUMENTS EFFECTED:				CHANGE CATEGORY		
				DER REVIEW REQUIRED		

☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☒ BOM

☐ MAJOR ☒ MINOR

☐ YES ☒ NO

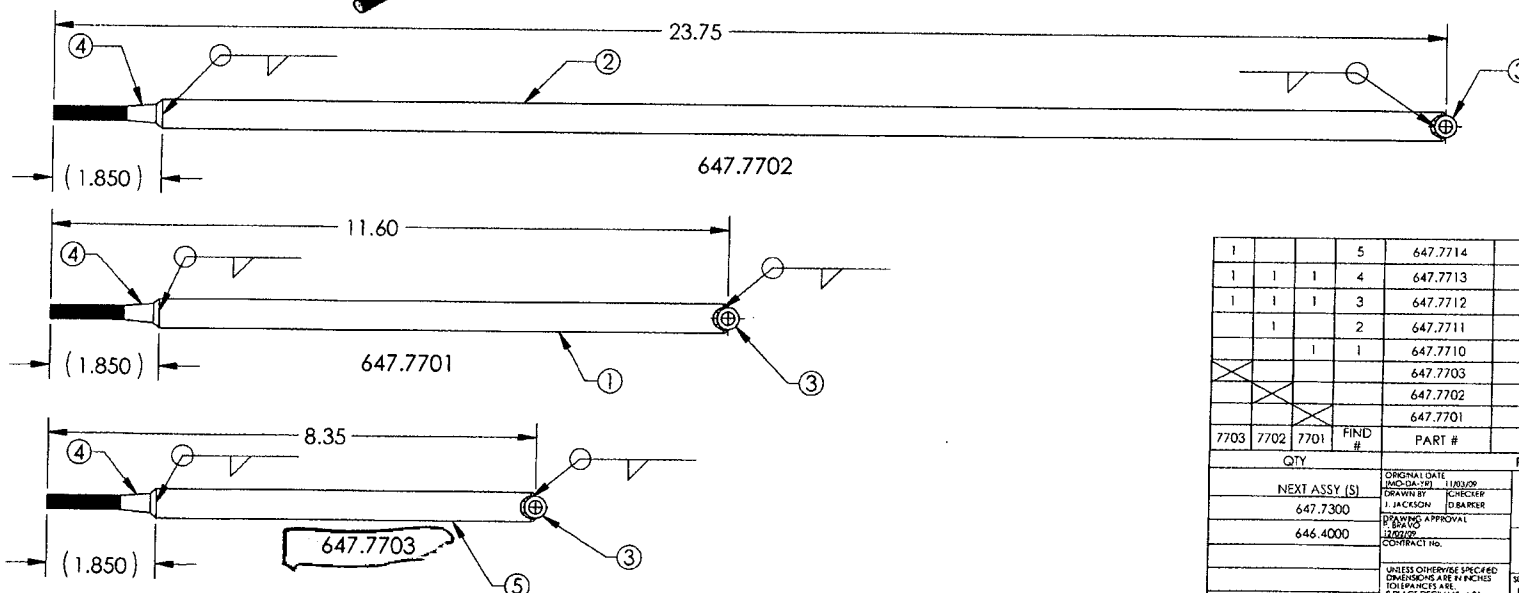
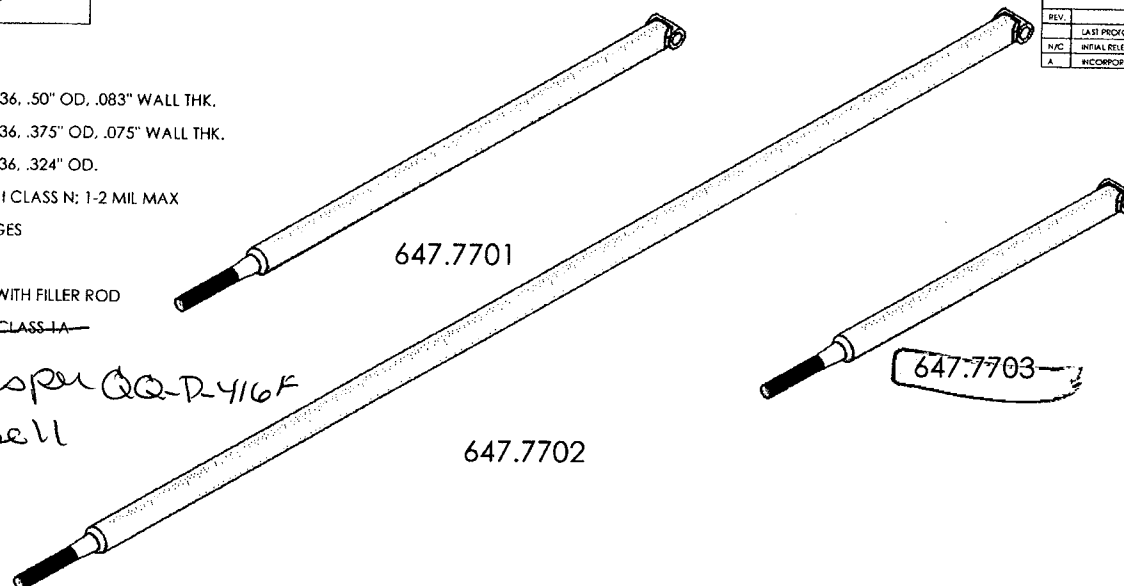
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NOTES:

1. MATERIAL: 4130 STEEL PER AMS-T-6736, .50" OD, .083" WALL THK.
2. MATERIAL: 4130 STEEL PER AMS-T-6736, .375" OD, .075" WALL THK.
3. MATERIAL: 4130 STEEL PER AMS-T-6736, .324" OD.
4. FINISH: PRIME IAW MIL-P-2337J TYPE I CLASS N; 1-2 MIL MAX
5. DEBURR AND BREAK ALL SHARP EDGES
6. IDENTIFY IAW MPP-120.
7. WELD IAW MIL-STD-2219, TIG WELD WITH FILLER ROD
8. FINISH: CAD PLATE IAW MIL-C-5541 CLASS 1A
9. MASK THREAD PRIOR TO FINISH

*as per QQ-D-416F
Class 1, type II*

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	LAST PROTOTYPE REVIEW, P92		NJC
2	INITIAL RELEASE	12/25/09	P. BRAYO
3	INCORPORATED ECHIDNA	11/13/14	P. BRAYO



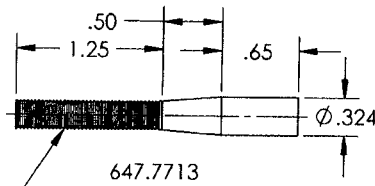
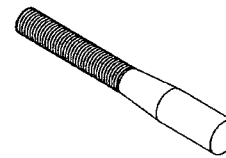
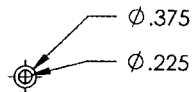
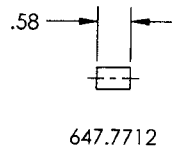
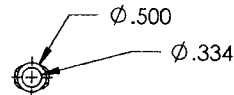
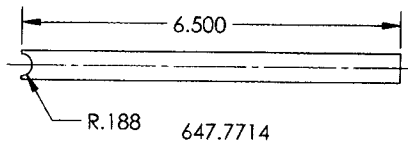
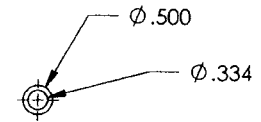
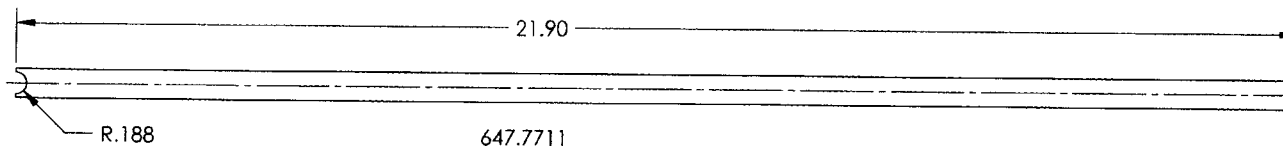
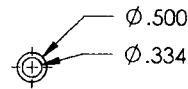
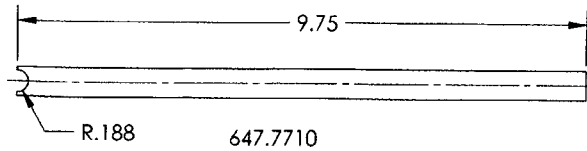
1			5	647.7714	STRUT TUBE	△	
1	1	1	4	647.7713	STRUT THREAD	△	△
1	1	1	3	647.7712	STRUT TUBE	△	
	1		2	647.7711	STRUT TUBE	△	
		1	1	647.7710	STRUT TUBE	△	
				647.7703	STRUT ASSY		△△
				647.7702	STRUT ASSY		△△
				647.7701	STRUT ASSY		△△
7703	7702	7701	FIND #	PART #	DESCRIPTION	MAT'L	SPEC.
QTY				PARTS LIST			
NEXT ASSY (S)				ORIGINAL DATE 11/03/09			
647.7300				DRAWN BY J. JACKSON			
646.4000				CHECKED BY D. BARKER			
				DRAWING APPROVAL			
				DATE 11/03/09			
				CONTRACT NO.			
				UNLESS OTHERWISE SPECIFIED			
				DIMENSIONS ARE IN INCHES			
				TOLERANCES ARE			
				3 PLACE DECIMALS ±.01			
				ANGLES ±.5°			
				SCALE NONE			
				SHEET 1 OF 2			

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

STRUT ASSY

SHEET 1 OF 2

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1/4 - 28 THREAD

ORIGINAL DATE 11/02/09		APICAL INDUSTRIES	
DRAWN BY: J. JACOBSON		2608 TEMPLE HEIGHTS DR.	
CHECKED BY: J. JACOBSON		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL P. BRAY		STRUT ASSY	
COUNTERACT NO.		647.7700	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°	SHEET B	CAGE CODE 07M16	REV. A
SCALE: NONE		SHEET 2 OF 2	

Linda Lacelle

From: Pablo Bravo
Sent: February-04-15 12:39 PM
To: Linda Lacelle
Cc: Dave Barker; Jason Gardiner; Jean-Luc Menard; Chantal Lavoie
Subject: Re: wrong spec for P/O: 27284

That works for me.

Pablo

On Feb 4, 2015, at 6:32 PM, Linda Lacelle <llacelle@dartaero.com> wrote:

Our cad spec is Cad Plating is to be done per QQ-P-416F Class I Type II
Can we go ahead with this?

LL

From: Dave Barker
Sent: February-04-15 12:12 PM
To: Linda Lacelle; Pablo Bravo; Jason Gardiner
Cc: Jean-Luc Menard; Chantal Lavoie
Subject: RE: wrong spec for P/O: 27284

Should be Cad plating. The MIL spec should be updated.

Thanks,

Dave

From: Linda Lacelle [<mailto:llacelle@dartaero.com>]
Sent: Wednesday, February 04, 2015 8:12 AM
To: "David Barker" (dbarker@apicalindustries.com); Pablo Bravo
Cc: Jean-Luc Menard; Chantal Lavoie

Subject: FW: wrong spec for P/O: 27284

Importance: High

Hi guys,

The new part 647.7701/7702/7703, calls for cad plate, but the MIL spec is for alodine. Can you please confirm what the correct spec is? We have a rush order and our supplier is waiting...

Thx

Linda

From: Chantal Lavoie

Sent: February-04-15 11:09 AM

To: Linda Lacelle

Subject: FW: wrong spec for P/O: 27284

Hi Linda,

Order sent to Cadorath 647.7703 rush order, finish is not per dwg see below.

C

From: Shipping [<mailto:specialty@cadorath.com>]

Sent: Wednesday, February 04, 2015 10:36 AM

To: Chantal Lavoie

Subject: wrong spec for P/O: 27284

Hi Chantal,

You sent us 20 struts and it says to cadmium plate them. But the spec underneath where it says to cad plate is MIL-C-5541 CLASS 1A, which is a spec for chemical conversion.

If you can let me know what you would like done, if it is for cad, what is the type and class and what colour?

Thanks,

Nick



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO27284**

Purchase Order Date 1/30/2015

PO Print Date 2/4/2015

Page Number 1 of 2

Order From :

VC-CAD002

Ship To : DART AEROSPACE LTD

CADORATH COATING
2150 LOGAN AVE.
WINNIPEG, MB R2R 0J2
CA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 204 633 9420

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Ship To Contact

Terms

Net 30

Ship To Phone

Currency

CAD

Ship Via:

FedEx Overnight collect

FOB

Destination-Collect

Ship Acct:

Line Nbr	Reference Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
Line Comments			Promise Date				
Delivery Comments							

1	128211	647.7703 STRUT ASSEMBLY	2/6/2015		20.00	\$0.00	\$0.00
---	--------	-------------------------	----------	--	-------	--------	--------

Yes

2/6/2015

FINISH: CAD PLATE AS PER QQ-P-416F CLASS 1, TYPE II

205-02-02

Line Total: \$0.00

2	71401-45	PROCUREMENT QUALITY CLAUSES	2/6/2015		1.00	\$0.00	\$0.00
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No

2/6/2015

Procurement Quality Clauses

A005 right of entry

A012 chemical and physical test report

A021 dart aerospace processing

A024 process certifications

A026 certification of material conformance

A043 retention of quality documents

Note:

2/4/2015

Packing Slip



Cadorath Coating

2150 Logan Avenue, Winnipeg, Manitoba R2R-0J2

Phone: (204) 633-9420 Fax: (204) 633-8033

INVOICE NUMBER:

S75048

Net 2% Interest Per Month charged on Overdue Accounts.

Any claims for shortages, overcharges, or damaged goods must be made within seven (7) days from receipt of goods.

Sold To: Dart Aerospace Ltd. 1270 Aberdeen St. Hawksbury, ON K6A 1K7 ShipTo:
--

Customer Order #:	Date Received:	Terms:	G.S.T. #:	Ship Via:	Ship Date:
27284	Feb-05-2015	NET 30 DAYS	10071 6547 RT0001		Feb-05-2015

Item # Qty P/N & Description

1	20 EA	STRUT	S/N
		P/N 647.7703	W/O 143745

Sp 15-02-6

**CERTIFICATE OF
CONFORMANCE**

**CADORATH PLATING CO. LTD.
2150 LOGAN AVENUE
WINNIPEG, MANITOBA R2J-0J1**

DATE: Feb-05-2015

CONSIGNED TO: Dart Aerospace Ltd.
1270 Aberdeen St.
Hawksbury, ON K6A 1K7

W/O #: 143745

INVOICE #: 75048

**CONTRACT OR
PURCHASE ORDER #** 27284

DESCRIPTION: STRUT

QTY 20

P/N # 647.7703

S/N #

CADMIUM PLATE IAW AMS QQ-P-416C TYPE 2 YELLOW CLASS 1.
BAKE HEAT CHART # 15-101.

**CERTIFICATE: I certify that the items indicated here on have
been inspected and tested and conform to all specifications
and requirements detailed on the contract or purchase order.**

Approved Inspector:

